Science Lesson Plans

Level 3

Term 4

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Week 1

Week	Curriculum Strand	Topic	Day	Specific Objective	Home work
1	Structures and mechanisms	Stability	1	To describe ways in which strength of different materials can be altered or changed	
1			2	To describe ways in which strength of different materials can be altered or changed	H.W
1		do	3	To describe ways in which forces alter the shape or strength of different structures	
1			4	To describe ways in which forces alter the shape or strength of different structures	H.W
1		do	5	Assessment	

Level:3 Term:4
Week:1 Day:2

Strength of material

Observation Worksheet (Activity 1)

Name___________________ **Date**____________________

Sheet of paper	**No of weights added**	
Tube of paper	**No of weights added**	

What happened after changing paper into tube shape?

____

____

____

Strength of material

Observation Worksheet (Activity 1)

Name___________________ **Date**____________________

Sheet of paper	**No of weights added**	
Tube of paper	**No of weights added**	

What happened after changing paper into tube shape?

____

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____

Strength of Material

Observation Worksheet (Activity 2)

Thread A	**No of weights added**	
Thread B	**No of weights added**	
Thread C	**No of weights added**	

Which thread is the strongest? Why?

___

___

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Strength of Material

Observation Worksheet (Activity 2)

Thread A	**No of weights added**	
Thread B	**No of weights added**	
Thread C	**No of weights added**	

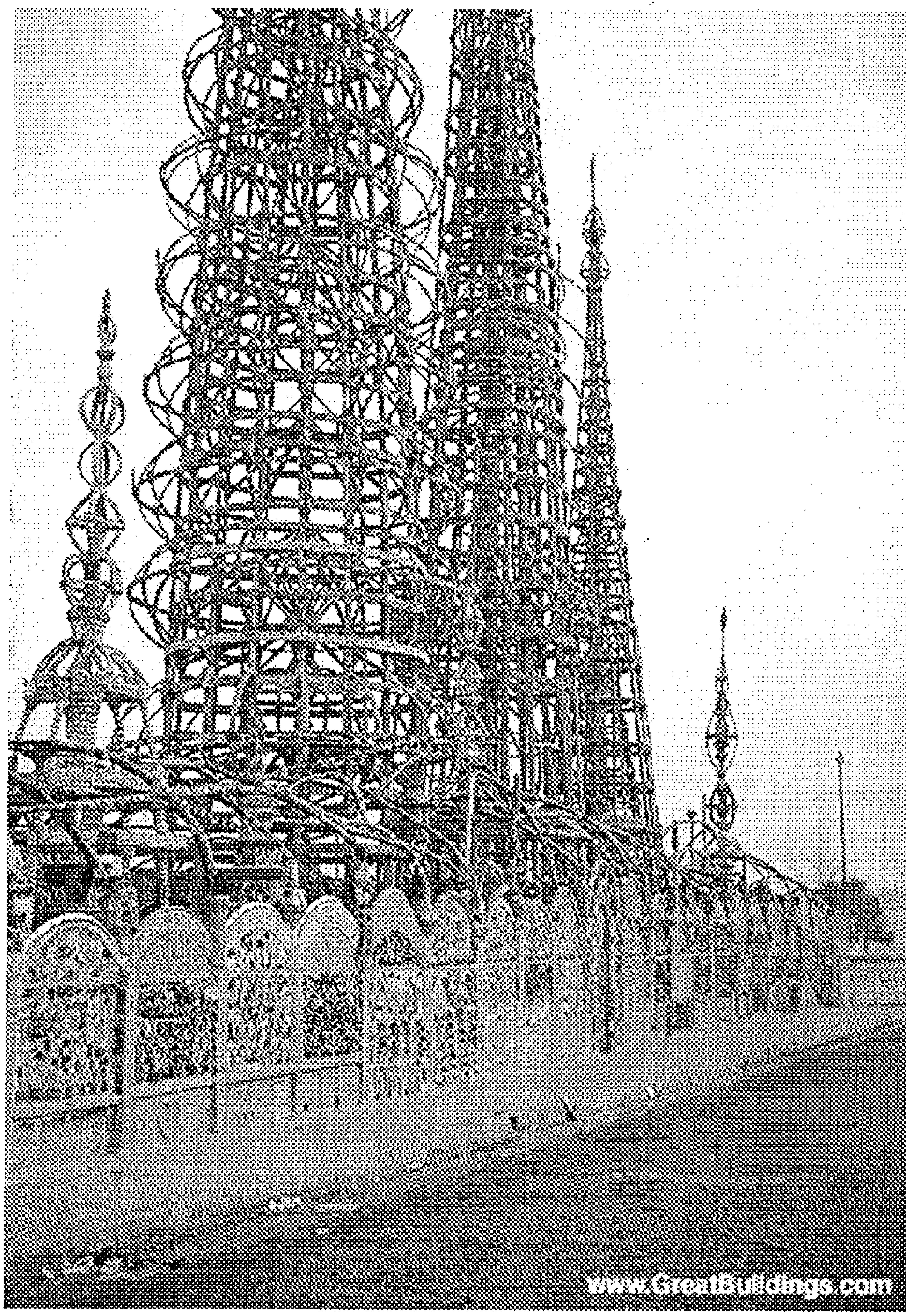
Which thread is the strongest? Why?

___

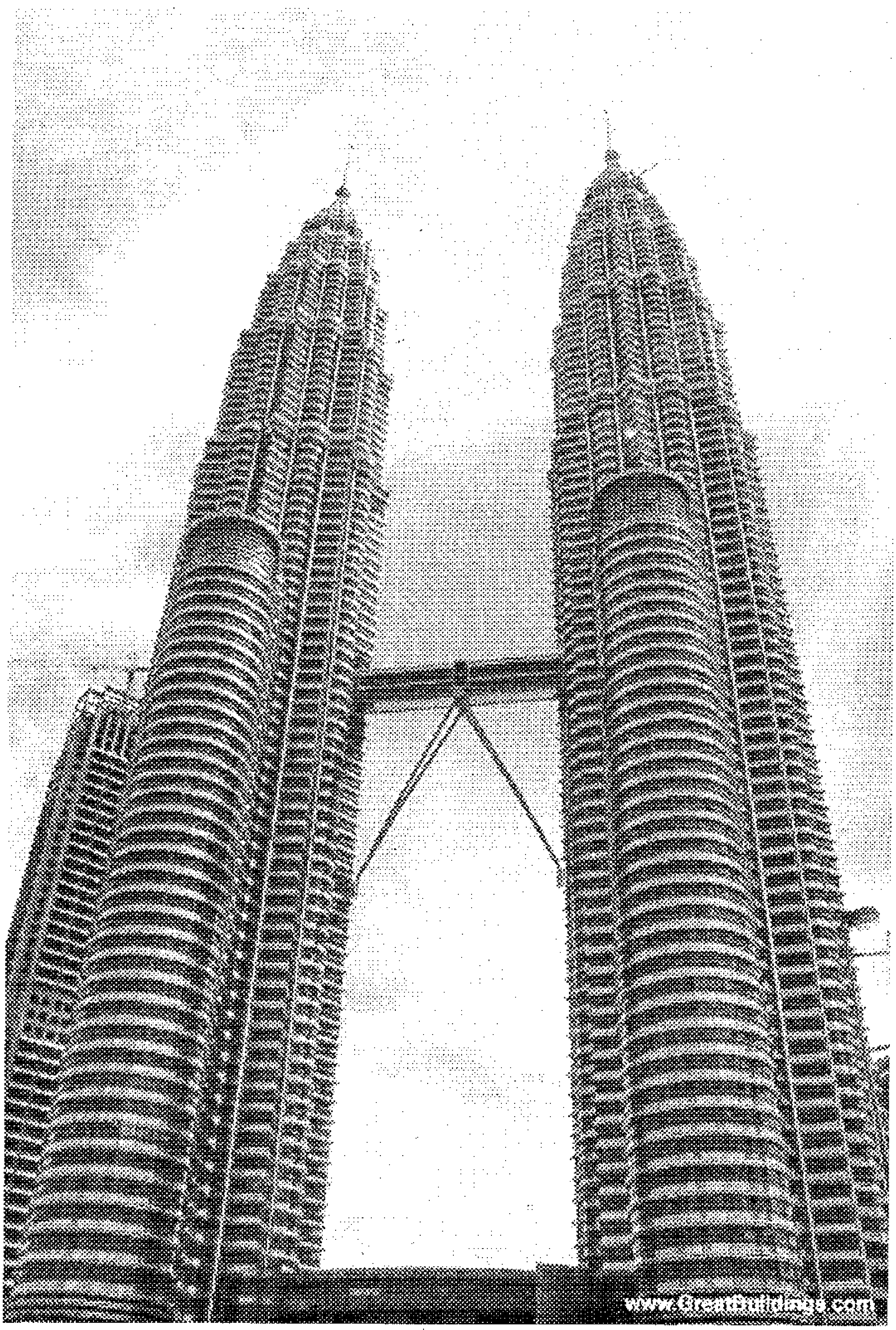
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Picture of Tower



Picture of Tower

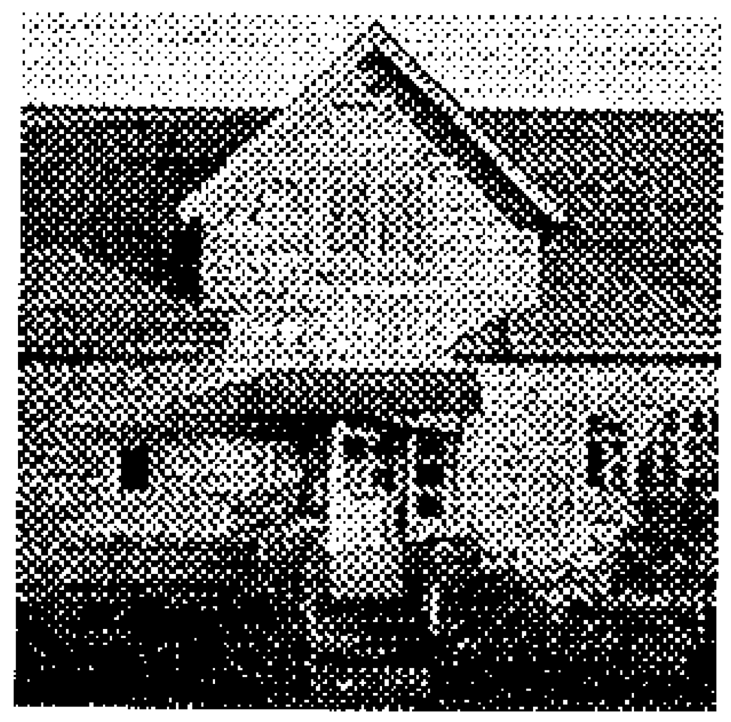
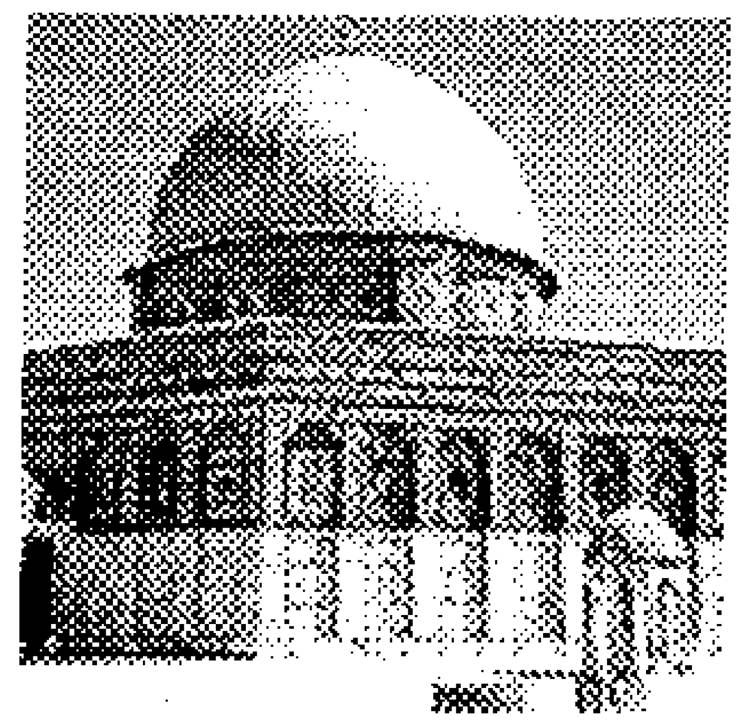


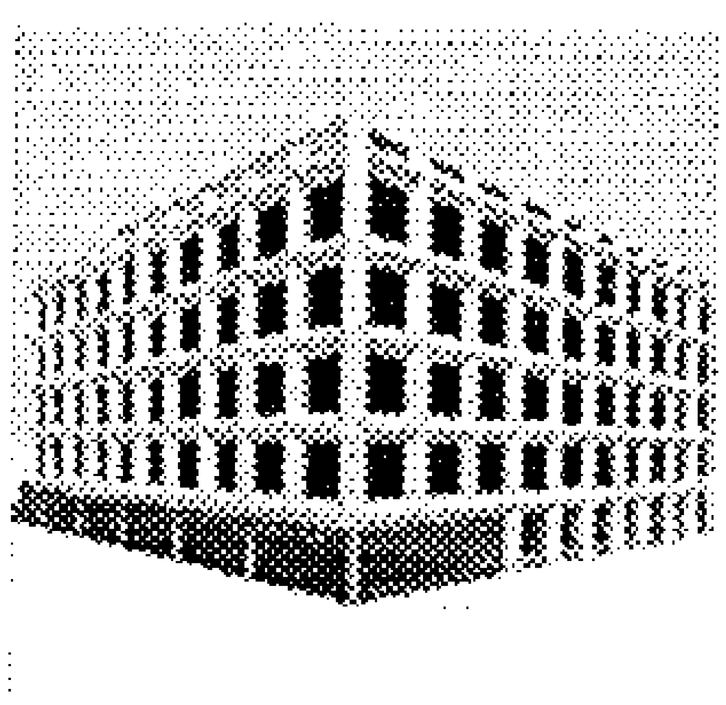
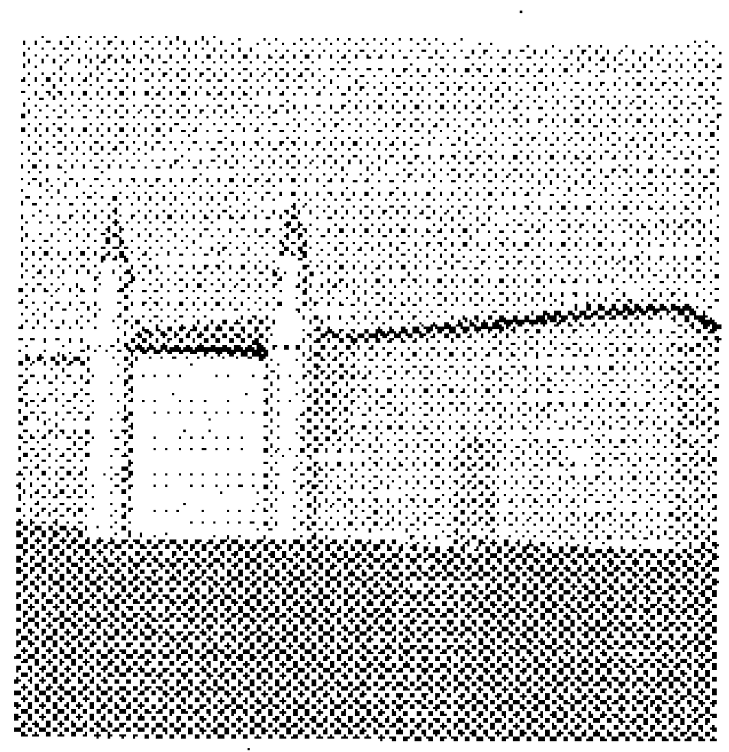
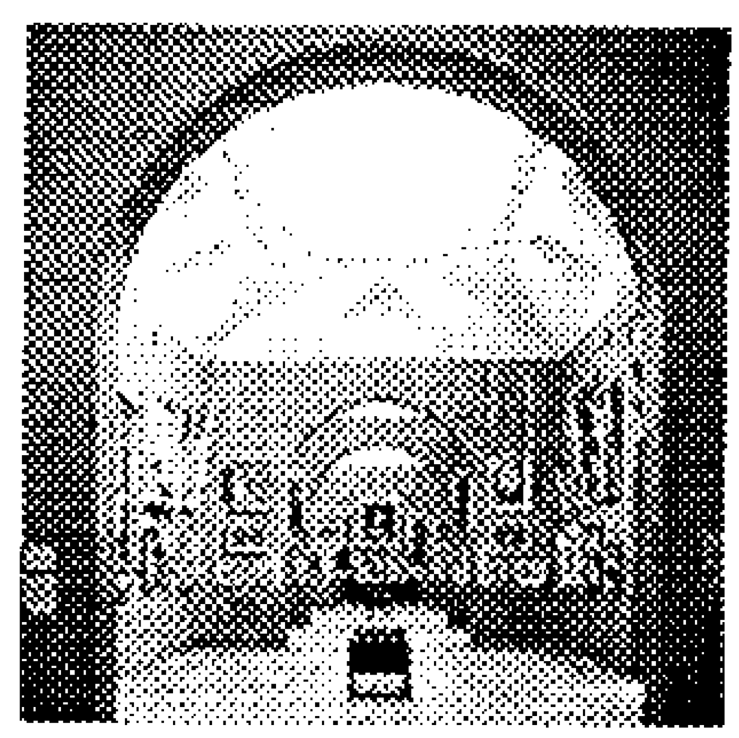
Level: 3 Term: 4
Week: 2 Day: 1

Shapes in structures

Worksheet

What shapes do you see in these structures?

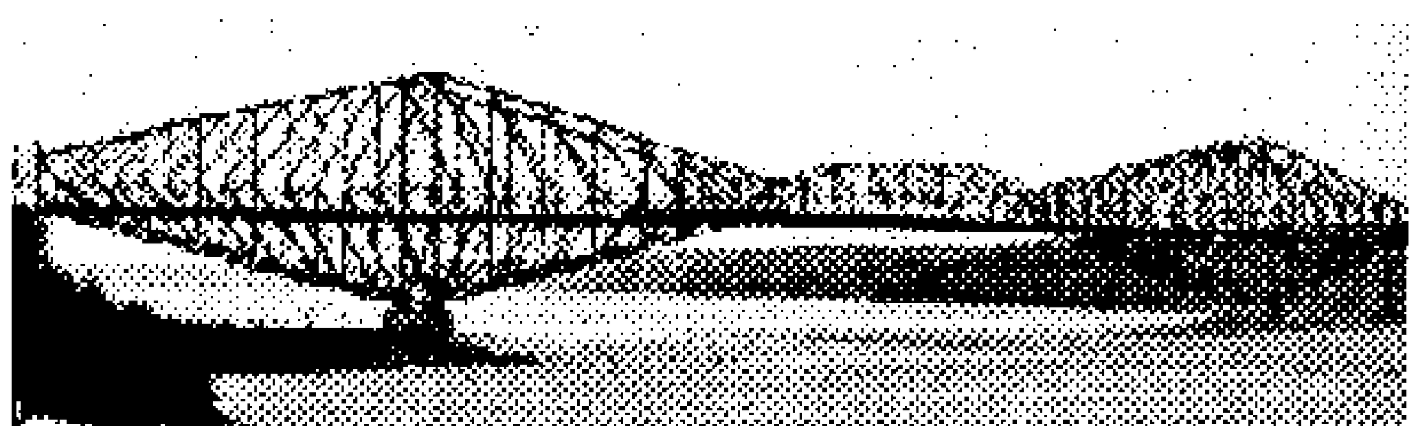
Level: 3 Term: 4

Week: 2 Day: 4

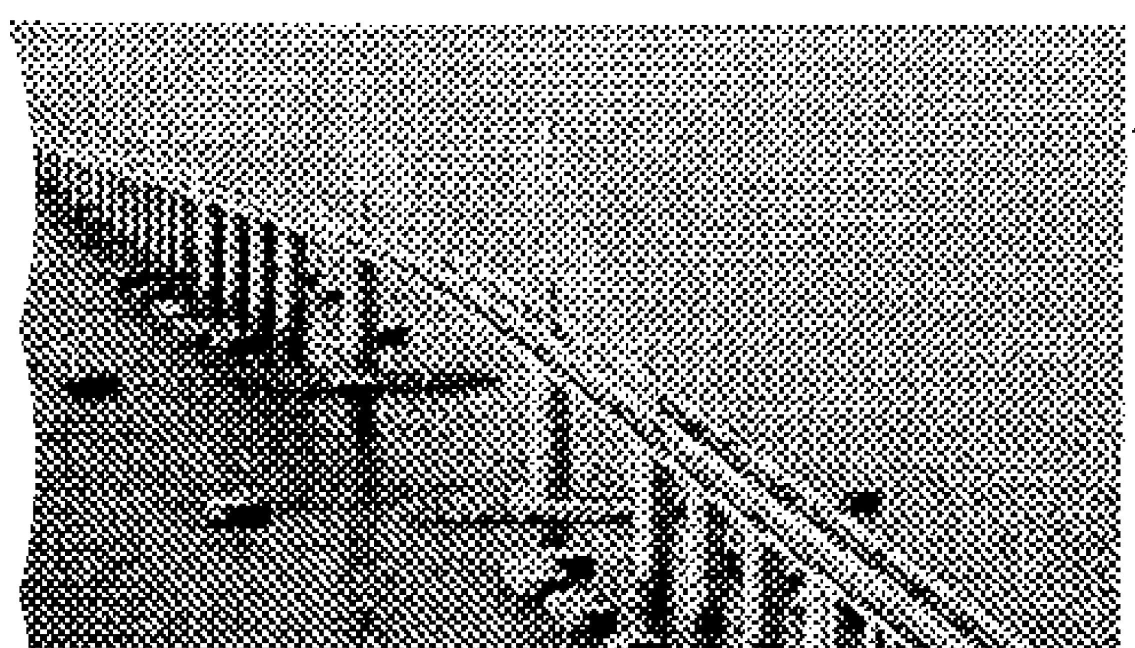
Struts and Ties

Worksheet (Activity 1)

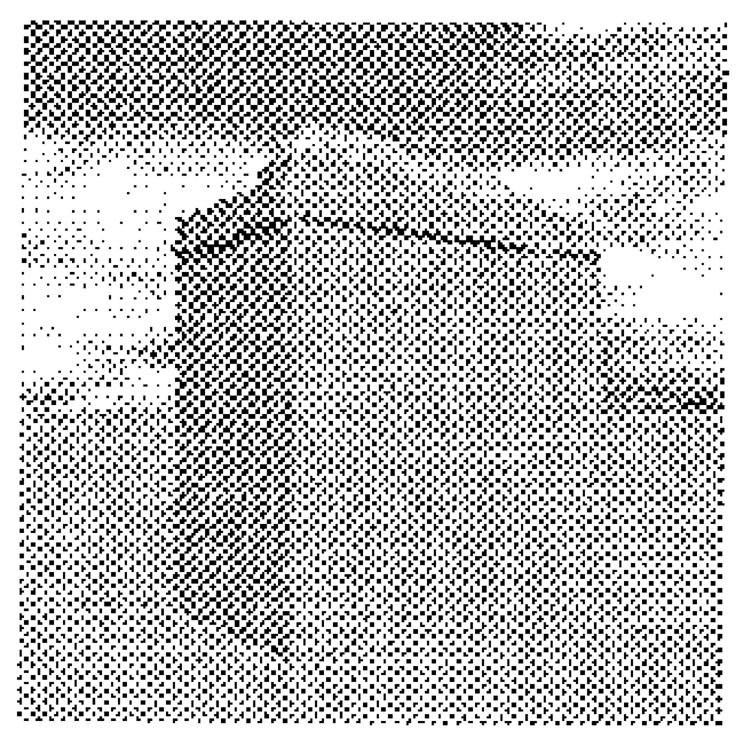
Q 1) Write which of these structures, have materials in Compression and Tension.

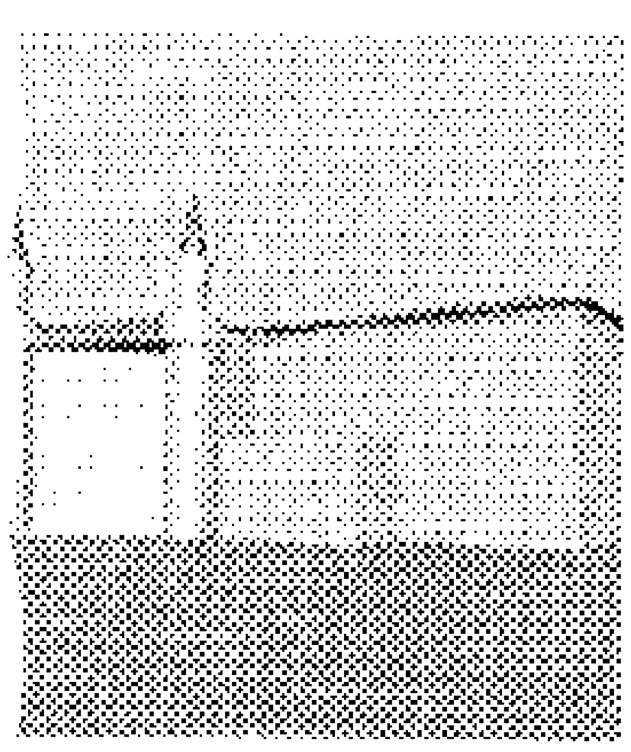


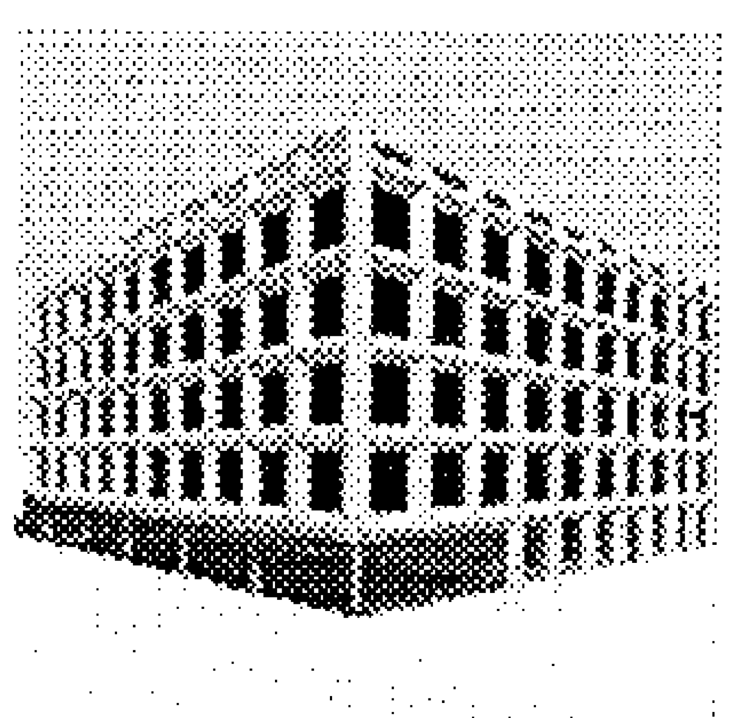
Quebec 1917 Cantilever Bridge



Cable-staying bridge Tampa, Fl.







Level 3 Term 4
Week 2 Day 4

Struts and Ties

Worksheet(Activity 2)

Q 1) What are Struts?

Q 2)What are Ties?

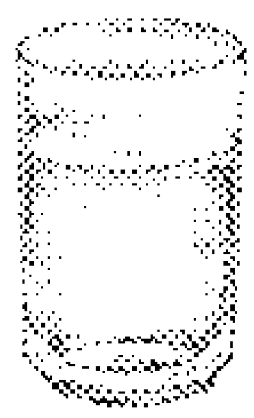
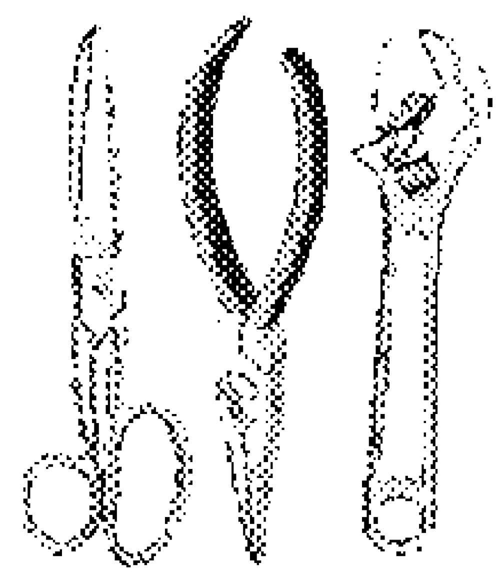
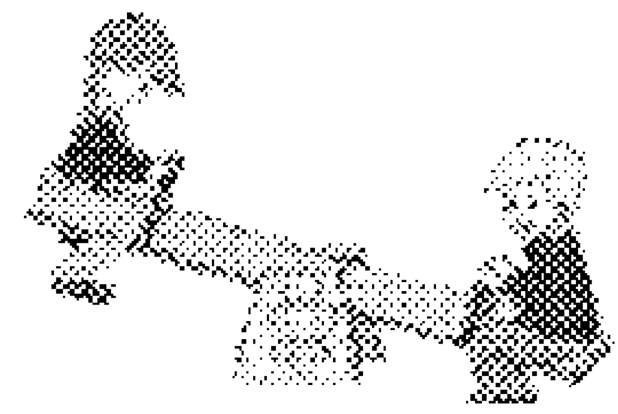
Q 3) Why do engineers add struts and ties to their designs of structures?

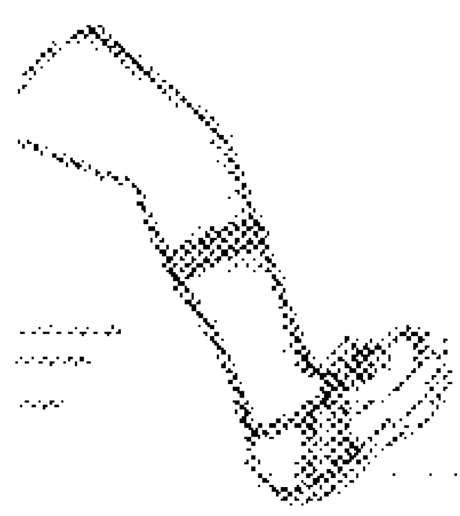
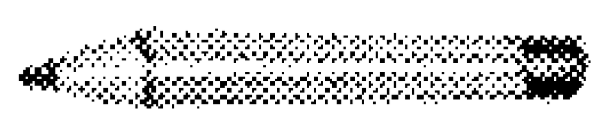
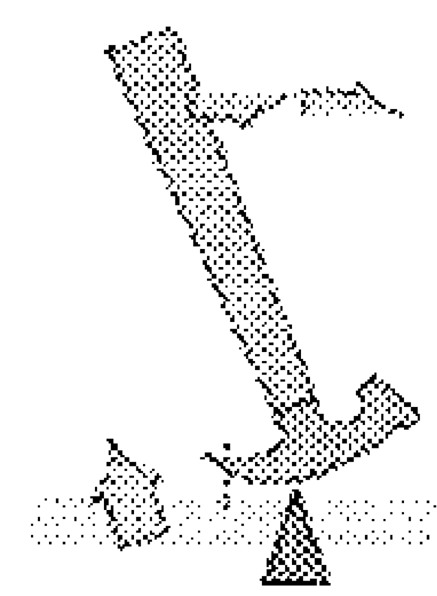
Q 4) Look at these structures and identify where you can find Struts and Ties?

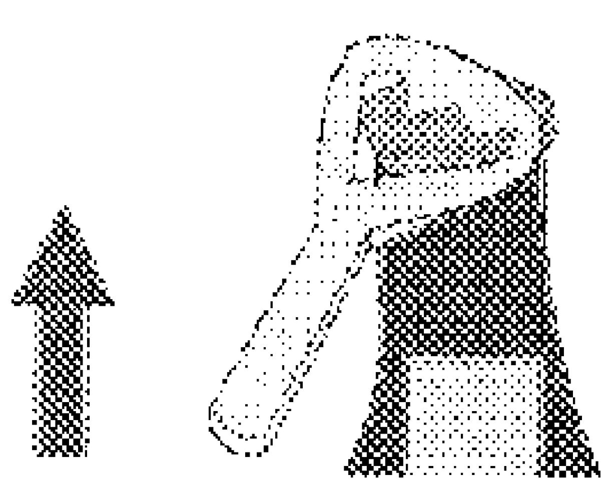
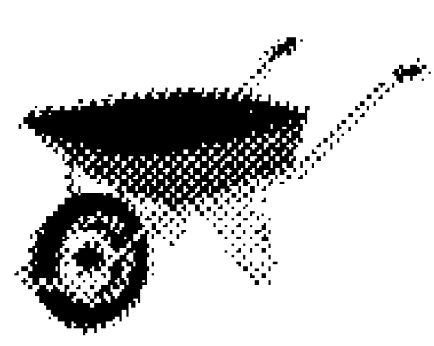
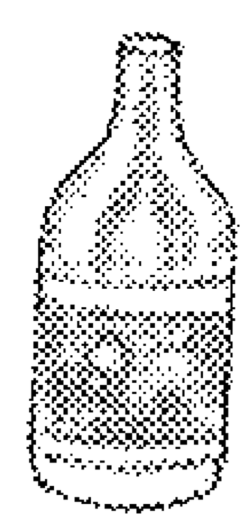
Level: 5 Term 4
Week 3 Day 1

Lever
Worksheet(1)

Q I) Which one of these are levers? Write lever under the pictures, which you think, are levers.

Level : 3 Term : 4
Week : 3 Day : 2

Lever experiment
Observation Recording Sheet

Position of Fulcrum		Effort needed more / less
In the middle	Six inches	
Near the load	Ten inches	
Near the effort	Three inches	

Conclusion:

When is it easier to move an object? Put a tick.

a) When the fulcrum is in the middle

b) When the fulcrum is near the load

c) When the Fulcrum is near the effort

Things to think about during the experiment:

1) Which simple machine was used in this experiment?

____

____

2) Choose the correct answer. Put a tick.

3) What is ruler in this experiment? Lever or Fulcrum

4) What is edge of the table in this experiment? Load or Fulcrum

5)What is book in this experiment? Fulcrum or Load.

6) Does it make a difference on the ruler where you place when trying to lift it a load? Yes/No

Level - 3 Term - 4
Week - 3 Day - 3

Function of Levers
Worksheet

Q 1) Which lever do you use in the playground to lift you up and your friend? Draw it and show where the fulcrum is placed?

Q 2) If you have to move a big stone by using a lever, at which position will you place the fulcrum? Put a tick.

a) Near the load

b) In the middle of the lever

Q3) The word fulcrum means. Put a tick.

a) A lever

b) The balance point of a lever

Q4) Effort in a lever means

a) Force

b) Weight

Q5) Write down five examples of levers, which you use in your school or home. How do these levers help you?

Level 3 Term 4
Week 5 Day 4

Levers

Worksheet

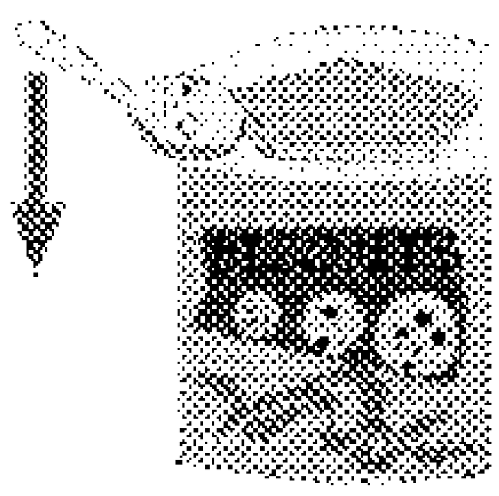
Look at these pictures of the levers and write how does each one help us. Write the number of the statements with pictures.

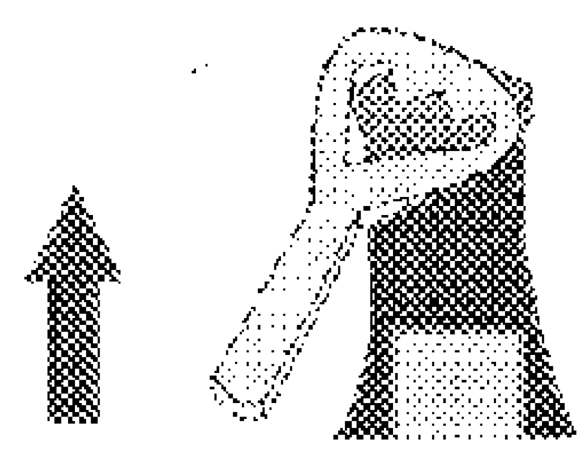
Which one of these:

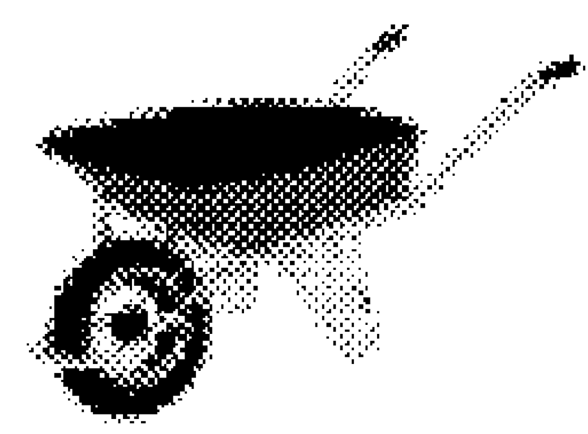
A) Reduce the force needed to move the load

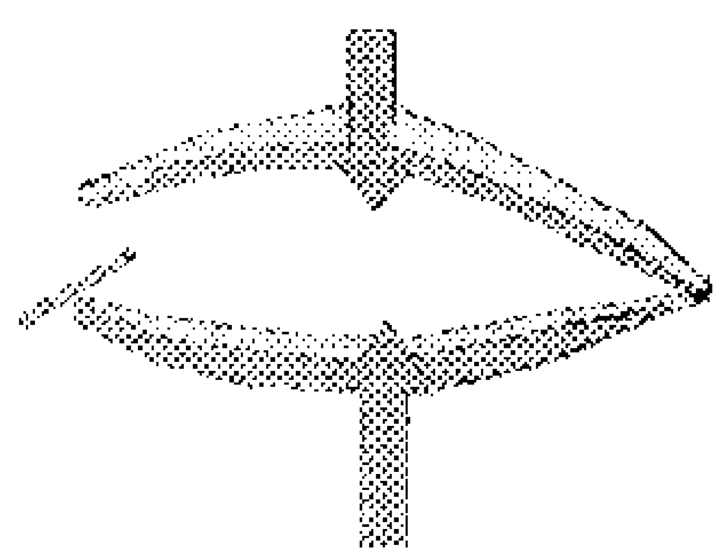
B) Increase the speed of something

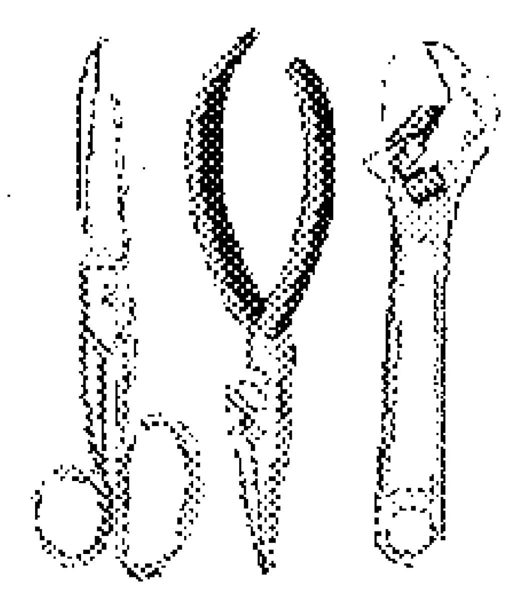
C) Makes it easier to pick something



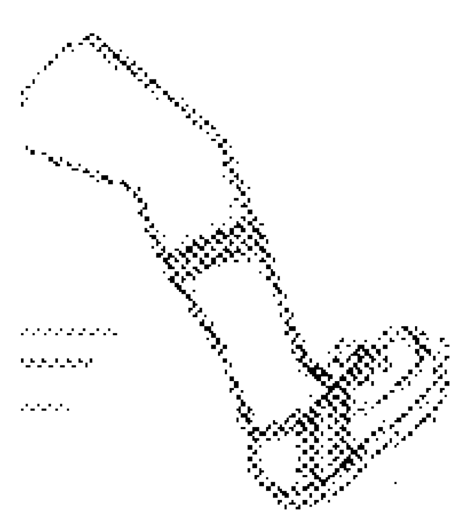












What is Soil
Recording Worksheet

Name____________________ **Date**____________________

Take a closer look at soil and record what you find.

Soil Sample	Observations
Color	
Smell	
How it feels: Smooth, Sticky, gritty	
What I found: Stones, leaves, grass, roots, insects	
Is it wet or dry?	
Does it make a ball? Loose ball or tight ball	

Level [illegible] Term 4
Week [illegible] Day [illegible]

Comparing Soil Samples

Worksheet

Name________________________ **Date**________________________

	Sandy soil (A)	**Clay (B)**	**Garden soil(C)**
What is the color **Light,** **Dark,** **Very dark**			
Smell			
How it feels **Smooth, stick, gritty**			
What I found in it: **Leaves, stones, twigs, grass, roots, insects or any thing else.**			
Does it make a ball: **Loose ball or tight ball**			
What is the size of particles? **Very small** **Small** **Large**			
Are the particles smaller than the sand particles			

Level. 3 Term. 4
Week. 6 Day: 4

Growing seeds
Recording worksheet

Date seed planted	**Sand**	**Clay**	**Loam**	
No of days seed germinated				
Root length (R)				Day 1
Shoot length(S)				
R				Day 2
S				
R				Day 3
S				
R				Day 4
S				
R				Day 5
S				
R				Day 6
S				

Compare the results and make conclusion in which soil plant root and shoot growth was better.____

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Note: After the germination of the seeds observe how root and shoot grows in different samples of soils every day.
Record the length of root and shoot in centimeters.

Level: 3 Term: 4
Week: 6 Day: 5

Separating Soil
Recording Sheet

Name____________________ **Date_____________________**

After adding water what happened to the soil	
Which particles fall quickly big or small	
After 10 minutes: **How many layers of soil have formed.**	
Next day: **How many layers have formed**	

Separating Soil
Recording Sheet

Name____________________ **Date_____________________**

After adding water what happened to the soil	
Which particles fall quickly big or small	
After 10 minutes: **How many layers of soil have formed.**	
Next day: **How many layers have formed**	